

1 May 2003

Safety

Commander's Rail Operations Checklist and Risk Assessment

***This pamphlet supersedes USAREUR Pamphlet 385-15-2, 18 July 2002.**

For the CG, USAREUR/7A:

ANTHONY R. JONES
Major General, GS
Chief of Staff

Official:



GARY C. MILLER
Regional Chief Information
Officer - Europe

Summary. This pamphlet provides checklists and generic risk assessments for conducting rail-loading and in-transit supercargo operations, and for the Railhead Operations Training and Verification Program. This pamphlet must be used with AE Pamphlet 385-15.

Applicability. This pamphlet applies to U.S. Army personnel who are planning or conducting rail-loading operations in the European region.

Supplementation. Commanders will not supplement this pamphlet without USAREUR G1 (AEAGA-S) approval.

Forms. AE and higher-level forms are available through the Army in Europe Publishing System (AEPUBS).

Records Management. Records created as a result of processes prescribed by this pamphlet must be identified, maintained, and disposed of according to AR 25-400-2. File numbers and descriptions are available on the Army Information Management Records System website at <https://www.armis.army.mil>.

Suggested Improvements. The proponent of this pamphlet is the USAREUR G1 (AEAGA-S, DSN 370-8084). Users may suggest improvements to this pamphlet by sending DA Form 2028 to the USAREUR G1 (AEAGA-S), Unit 29351, APO AE 09014-9351.

Distribution. A (AEPUBS).

CONTENTS

1. Purpose
2. References
3. Explanation of Abbreviations
4. Checklists, Tables, and Training
5. Railhead Operations Training and Verification Program

Tables

1. Railhead Preoperation Checklist
 2. Railhead Loading and Unloading Checklist
 3. Generic Railhead-Risk Assessment
 4. Rail Supercargo Checklist
 5. Rail Supercargo Generic Risk Assessment
-

1. PURPOSE

This pamphlet provides tools to enable leaders who are planning or conducting rail operations in Europe to do so with minimum risks to personnel and equipment. This pamphlet must be used with AE Pamphlet 385-15.

2. REFERENCES

- a. AE Pamphlet 385-15, Leaders Operational Accident-Prevention Guide.
- b. USAREUR Regulation 55-26, Unit Movement Planning.
- c. USAREUR Regulation 385-55, Prevention of Motor Vehicle Accidents.

3. EXPLANATION OF ABBREVIATIONS

b&b	blocking and bracing
CG, USAREUR/7A	Commanding General, United States Army, Europe, and Seventh Army
EOD	explosive ordnance disposal
G1	Deputy Chief of Staff, G1, USAREUR
HN	host nation
MCT	movement control team
MILVAN	military-owned demountable container
NCO	noncommissioned officer
NCOIC	noncommissioned officer in charge
OIC	officer in charge
OSHA	Occupational Safety and Health Act
POL	petroleum, oils, and lubricants
USAREUR	United States Army, Europe
UXO	unexploded ordnance

4. CHECKLISTS, TABLES, AND TRAINING

a. Commanders and other leaders who are planning or conducting rail operations will use the appropriate tables in this regulation ((1) through (5) below) to help them assess hazards and risks. The tables will be used as a starting point in assessing and controlling specific operations. Paragraph 3 defines abbreviations used in the tables.

- (1) Table 1, Railhead Preoperation Checklist.
- (2) Table 2, Railhead Loading and Unloading Checklist.
- (3) Table 3, Generic Railhead-Risk Assessment.
- (4) Table 4, Rail Supercargo Checklist.

(5) Table 5, Rail Supercargo Generic Risk Assessment.

b. Commanders will work with the movement control staff and local United States Army Installation Management Agency, Europe Region Office, personnel and assets to train railhead teams. Railhead teams must receive the training specified in paragraph 5 to prepare for and manage railhead loading and unloading operations.

5. RAILHEAD OPERATIONS TRAINING AND VERIFICATION PROGRAM

The Railhead Operations Training and Verification Program is available at <http://www.per.hqusareur.army.mil/services/safetydivision/deployment/rail%20ver%202.ppt>.

a. Commanders and supervisors will use this program with USAREUR Regulation 55-26 and AE Pamphlet 385-15.

b. Commanders will ensure all personnel involved in rail operations (loading, unloading, handling property or materials) complete this training.

c. Commanders will ask for branch movement control team rail experts to participate in training when possible. Local railhead facilities should also be used when possible. This will provide the best training and verification benefit to participants.

Table 1 Railhead Preoperation Checklist	
ITEM TO CHECK	COMPLETED?
Commanders. Before beginning rail-loading or unloading operations, commanders will ensure--	
• Key railhead personnel are certified through the Railhead Operations Training and Verification Program.	
• Personnel conduct a risk analysis of the railroad site considering common risk factors.	
• Soldiers are briefed and instructed on safety standards, procedures, and results of the risk assessment.	
• The following safety equipment is available:	
a. Eye protection.	
b. Flashlights or chemical lights for ground guides.	
c. Hearing protection.	
d. Kevlar or OSHA-approved hardhats.	
e. Leather or work gloves (<i>not wool inserts</i>).	
f. Reflective vests.	
• The following supervisory personnel are available and qualified:	
a. OIC.	
b. NCOIC.	
c. Safety officer or NCO.	
• Trained ground guides are available.	
• Medical support is available at loading and unloading sites and medical support personnel know the most direct route to medical facilities.	
• Safety standards are monitored and enforced.	
• Participants are shown the location of high-voltage lines, in-service tracks, switches, and other hazardous locations and equipment in the workarea.	
• Protection from cold or inclement weather (for example, warming tents) is provided.	
Train Commanders. Train commanders will ensure the following requirements have been met before rail loading or unloading:	
• Military units and organization personnel have been--	
a. Briefed on regulatory requirements before each rail movement.	
b. Made aware of unsafe conditions in the railhead area.	
c. Told to keep a safe distance from electrical powerlines and systems in the workarea.	
• Supervisors are aware that when powerlines are switched on temporarily for technical reasons--	
a. Operations must cease.	
b. The area must be cleared of personnel.	

Table 1 Railhead Preoperation Checklist	
ITEM TO CHECK	COMPLETED?
c. Operations will not resume until the appropriate railway authority (for example, <i>Deutsche Bundesbahn</i> in Germany) confirms that electricity has been shut off and grounded in the railhead area. (Note: <i>Electrified rail systems with overhead powerlines and feeder lines installed beside rail tracks carry 15,000 volts or more.</i>)	
Transportation Officer or Representative. The transportation officer or designated representative will--	
• Coordinate with the responsible railway official and confirm that electric overhead powerlines have been shut off and grounded in the railhead workarea. Under no circumstances will operations start until confirmation is received.	
• Keep units informed of changing conditions.	
• Enforce the rules of conduct for ensuring safe operations.	
• Make soldiers aware of warning signs posted in the local workarea and affixed to railway equipment. Equipment with steps or stepladders extending higher than 2 meters above the rail surface will be avoided.	
Personnel. Personnel will--	
• Wear Kevlar helmets or OSHA-approved hardhats.	
• Wear leather or work gloves when handling chains, wire ropes, blocking, tools, or any other form of bracing material.	
• Be equipped with reflective vests and flashlights during darkness.	
• Not climb on railcars, unloaded vehicles, containers, or other equipment without specific permission from the OIC or NCOIC. <i>This will apply even when no overhead line is installed above the tracks. Only the OIC or NCOIC may declare an area safe from electrical hazards.</i>	
• Be informed that the local transportation representative in charge of rail uploading or downloading is the only person authorized to inform HN supervisors when railcars may be moved. <i>The transportation representative will be the only person wearing a white armband.</i>	
• Stay off of towers, light standards, signal bridges, and other similar structures on the rail right-of-way.	
• Not use ladders, poles, tools, or any other equipment that may come closer than 1.5 meters to electrical powerlines while carried or used.	
Vehicle Operators. Vehicle operators will remove whip antennas from vehicles before entering the rail-loading site. <i>Antennas will not be remounted until vehicles are in the staging area away from electrical hazards.</i>	

Table 2	
Railhead Loading and Unloading Checklist	
ITEM TO CHECK	COMPLETED?
OIC or NCOIC. The OIC or NCOIC will ensure--	
• Support legs are lowered and tailgates and side braces are removed (if necessary) before loading or unloading operations.	
• Trash is cleared from the area before the train leaves.	
• Railcars are inspected before loading to ensure ice, snow, and dunnage are removed.	
Ground Guides. Ground guides will--	
• Use standard hand-and-arm signals (with flashlights after dark).	
• Not run or walk backwards or place themselves in a dangerous position between two vehicles or between any moving piece of equipment and a pinch point. <i>USAREUR Regulation 385-55 prescribes ground-guide requirements for various types of vehicles.</i>	
Train Commanders. Train commanders will lock the tracks and control the keys.	
HN Railroad Wagonmasters. HN wagonmasters must check equipment with traveling tubes or booms and ensure it is properly tied down.	
Commanders. Commanders will ensure personnel working at the railhead are briefed not to--	
• Be on the same railcar as a moving vehicle.	
• Ride in or climb on tanks, vehicles, and other equipment being transported by rail after the vehicles and equipment have been locked.	
• Enter equipment during stops.	
Vehicles. Vehicles will be secured by chock blocks and bracing according to rail transport guides. Commanders must ensure--	
• Vehicles are properly secured.	
• Gun barrels are locked and secured (confirmed by railroad personnel and the OIC in the consignment note).	
• Railcars are returned well swept (after unloading) and nails and wire remnants are completely removed	

Table 3 Generic Railhead-Risk Assessment			
TASK	HAZARD	CAUSE	CONTROL MEASURE
Work at or around the railhead	Electrical shock	Contact with high-tension, overhead wires	<ul style="list-style-type: none"> ● Railhead commander will verify with MCT that overhead power is off and grounded before allowing any worker to approach the train. ● Workers will be briefed on how and when to stand on loaded vehicles. ● Do not install antennas on vehicles while on railhead. ● Establish a staging area for reinstalling antennas on vehicles. ● Do not carry or use ladders, poles, or other tools or equipment that could come within 1.5 meters of overhead wires.
	Being hit by a train	Falling under or in front of a moving train	<ul style="list-style-type: none"> ● All workers will be briefed to stay clear of railroad tracks and railcars until the train has been completely stopped and secured, and train blocking chocks are in place. ● Passengers will not disembark until cleared by the railhead commander.
	Fire or explosion	Ignition of flammable or explosive products	<ul style="list-style-type: none"> ● Railhead commanders will brief all workers that smoking will be allowed only in designated smoking areas. ● Workers will not carry any flame or spark-producing devices into the railhead area. ● Railhead commanders will establish a spark- or flame-producing device turn-in point.
Remove b&b material and lower railcar siding from railcars	Pinching or cutting of hands or fingers	<ul style="list-style-type: none"> ● Lack of working room between vehicle, railcar, tools, and b&b material ● Poor lighting 	<ul style="list-style-type: none"> ● Brief workers on the dangers of the operation. ● Ensure workers wear leather gloves while handling b&b material and removing the blocking material. ● Ensure enough lighting is available during periods of limited visibility.
	Eye damage or eye loss	Flying chips of blocking material or nails, or contact with a railcar	<ul style="list-style-type: none"> ● Ensure workers removing b&b material wear protective headgear and eye goggles. ● Ensure observers either wear goggles or stand back far enough to prevent injury.
	Head or body injury	<ul style="list-style-type: none"> ● Sudden release of tension of bracing cables or chain ● Side of a railcar striking the body 	<ul style="list-style-type: none"> ● Ensure leather gloves are worn by workers. ● Ensure workers wear eye protection. ● Ensure warning is given when releasing cables or chains. ● Ensure protective headgear is worn. ● Use at least two workers to handle each side or end piece. ● Warn others when siding is being lowered.
	Nail in foot, leg, or hand	Nails or screws protruding from railcar or b&b material	<ul style="list-style-type: none"> ● All b&b handlers will wear leather gloves. ● Inspect railcars and b&b material before operations begin. ● Remove nails, screws, and other hazardous pieces immediately. ● Carefully hand b&b material with nails, screws, or other protruding metal to another worker, then place b&b material in a designated pile. ● Surround designated area for b&b material with engineer tape or other suitable device.

Table 3 Generic Railhead-Risk Assessment--Continued			
TASK	HAZARD	CAUSE	CONTROL MEASURE
Move vehicle onto or off railcars	Getting a hand or leg caught under a moving vehicle	<ul style="list-style-type: none"> • Worker removing b&b material while vehicle begins to move • Losing sight of ground guard • Failure of driver to follow ground guide instructions 	<ul style="list-style-type: none"> • Ensure enough lighting is available during periods of limited visibility. • Ground guide will ensure that all b&b material is removed and b&b workers are completely away from railcars before vehicles are moved.
	<ul style="list-style-type: none"> • Being hit by moving vehicle • Being pinched between two or more vehicles 	<ul style="list-style-type: none"> • Losing sight of ground guide • Failure of driver to follow ground-guide instructions • Worker not observing operation and surroundings 	<ul style="list-style-type: none"> • Use reflective vests to ensure drivers recognize ground guides. • Ensure enough lighting is available during periods of limited visibility. • Ground guide and driver will maintain constant eye-to-eye contact. • Only one ground guide will be in charge of each vehicle. • Driver will automatically stop vehicle if eye-to-eye contact is lost. • Ground guide will give halt signal if positioning is in question.
	• Vehicles dropping off railcar side	<ul style="list-style-type: none"> • Ground guide losing sight of railcar edge • Failure of driver to follow ground-guide instructions • Spanners not being used 	<ul style="list-style-type: none"> • Same as above. • Ensure spanners are available and used between railcars for all wheeled and small vehicles.
	Workers or ground guides slipping or falling on walking surfaces	<ul style="list-style-type: none"> • Worker not observing operation and surroundings • Rain-, ice-, or snow-covered walking surface 	<ul style="list-style-type: none"> • Ensure enough lighting is available during periods of limited visibility. • Remove ice or snow. • Apply melting agent to surface. • Brief workers on conditions and most slippery areas.
		Rain-, ice-, or snow-covered walking surface	<ul style="list-style-type: none"> • Ground guide and workers will not walk backwards or run.
	People falling from vehicles	Rain-, ice-, or snow-covered vehicle	<ul style="list-style-type: none"> • Ensure enough lighting is available. • Remove ice or snow. • Brief workers on conditions and most slippery areas. • Drivers maintain three-point contact. • Workers will carry flashlights or chemical lights during periods of limited visibility.
Move vehicle up or down railhead ramp	Vehicle falling from railhead ramp	<ul style="list-style-type: none"> • Loss of sight between ground guide and driver • Failure of driver to follow ground-guide instructions 	<ul style="list-style-type: none"> • Ensure enough lighting is available during periods of limited visibility. • Driver will halt vehicle if there is loss of sight between driver and ground guide. • Reflective vest will be worn by ground guide.
	Ground guide falling off ramp side	Ground guide walking backwards or running	<ul style="list-style-type: none"> • Same as above. • Ground guide will not walk backwards or run. • Leaders will constantly monitor operation.

Table 3 Generic Railhead-Risk Assessment--Continued			
TASK	HAZARD	CAUSE	CONTROL MEASURE
Move vehicle up or down railhead ramp (continued)	Ground guide being hit by vehicle	<ul style="list-style-type: none"> ● Ground guide too close to vehicle ● Driver not paying attention to ground guide 	<ul style="list-style-type: none"> ● Ensure enough lighting is available during periods of limited visibility. ● Ground guide will maintain distance between vehicle and him- or herself at all times. ● Ground guides will wear reflective vests. ● Leaders will constantly monitor all operations.
Load or unload MILVANs and trailers onto or off railcars	People getting pinched between MILVANs, trailers, or other objects or railcar ends	<ul style="list-style-type: none"> ● Closeness of MILVANs and trailers ● Large number of MILVANs and trailers ● Difficulty controlling MILVANs or trailer movement while attached to crane 	<ul style="list-style-type: none"> ● Ensure enough lighting is available during periods of limited visibility. ● Maintain clear zone around MILVANs and trailers while being lifted. ● Ensure safety monitor is observing entire lifting procedure to warn workers if danger is detected. ● Establish warning sign, sound, or order and brief all workers on correct usage. ● Ensure that all work halts if <i>anyone</i> sounds danger warning alarm. ● Use guide ropes to assist in controlling MILVAN and trailer movement.
	Guide-rope handlers injured	Guide rope wrapped around hand, arm, or leg	<ul style="list-style-type: none"> ● Ensure guide-rope handlers are briefed on how to properly use guide ropes. ● Ensure workers do not wrap guide ropes around hands or arms. ● Ensure excess guide rope does not tangle around operator's foot or leg. ● Guide-rope handlers hold rope tightly. ● Ensure guide rope-handler lets go of rope if MILVAN or trailer starts spinning. ● Ensure guide-rope handlers wear leather gloves.
Conduct side loading or off-loading of vehicles	Vehicles falling between railcars and platform	Gaps between train and platform, especially at ends of railcars	<ul style="list-style-type: none"> ● Avoid side loading if possible. ● Ensure spanners are available and used at gaps.
	People falling between railcars and platform	Gaps between train and platform, especially at ends of railcars	<ul style="list-style-type: none"> ● Same as above. ● Ensure workers are briefed on hazards. ● Ensure safety personnel closely monitor worker movement. ● Use the buddy system while moving through the workarea.

Table 3 Generic Railhead-Risk Assessment--Continued			
TASK	HAZARD	CAUSE	CONTROL MEASURE
Use warm-up tent	<ul style="list-style-type: none"> • Tent catching fire • People getting hurt or killed • Equipment getting lost 	<ul style="list-style-type: none"> • Hot smokestack touching tent flaps or tent • Hot pieces of soot landing on tent roof • Improper procedures • Improper fuel • Fuel control turned up too high • Fuel leak • No working fire (AB) extinguisher • Fire guard not in place of duty 	<ul style="list-style-type: none"> • Smoke stacks must have two complete sections above tent opening. • Three guy wires will be used. • Tent flaps must be tied back. • Checks for fuel leaks must be made hourly by a licensed fire guard. • Fuel source must be positioned at least 5 feet from tent. • Secondary containment must be available for fuel source and reserve fuel. • A drip loop must be made in the fuel-source hose with a drip can placed below the loop. • Reserve fuel will be at least 50 feet from tent. • Reserve fuel storage area must have secondary containment. • Reserve fuel area must be placarded. • Reserve fuel area must have a designated fire point with a class B fire extinguisher.
	Carbon-monoxide Poisoning	<ul style="list-style-type: none"> • Exposure to carbon monoxide • Incomplete combustion of fossil-burning fuels • Defective heating devices • Improper use of equipment • Inadequate ventilation 	<ul style="list-style-type: none"> • Brief workers on use of equipment. • Maintain heating equipment properly. • Use the proper fuel with the proper heater. • Remove defective heaters from use. • Ensure operators are properly licensed. • Ensure there is adequate ventilation.
Conduct operations during hot weather	Heat cramps	Heavy salt loss	<ul style="list-style-type: none"> • Supervisor will monitor subordinates. • Brief workers on symptoms. • During emergency actions, replace lost salt through saline injection or solution administered by a competent medical authority.
	Heat exhaustion	<ul style="list-style-type: none"> • Vascular collapse due to excessive salt loss • Dehydration • Excessive physical work 	<ul style="list-style-type: none"> • Ensure sufficient water intake. • Brief workers on symptoms. • Ensure acclimatization. • Elevate victim's legs. • Move victim to cooler place. • Assign light duty for 24 to 48 hours.

Table 3 Generic Railhead-Risk Assessment--Continued			
TASK	HAZARD	CAUSE	CONTROL MEASURE
Conduct operations during hot weather (continued)	Heat stroke	<ul style="list-style-type: none"> • High body temperature • Loss of water or salt • Excessive exposure to heat • High temperature, exposure to the sun 	<ul style="list-style-type: none"> • Ensure acclimatization. • Ensure sufficient water intake. • Ensure protection or shielding from excessive sun or heat. • Provide cool meals instead of hot ones and serve the heaviest meal later in the day. • Revise work schedules and workload. • Ensure close supervision. • Identify personnel who are most likely to incur a heat injury. • Lower body temperature by removing clothing and immersing victim in cold water, or sprinkle victim with water and fan the victim to hasten evaporation. • Evacuate victim to a hospital immediately.
	Sunburn	Overexposure to ultraviolet radiation of the sun	<ul style="list-style-type: none"> • Ensure protection or shielding from excessive sun. • Ensure the use of sunblock. • Limit the time spent in direct sunlight.
Conduct operations during cold weather	Hypothermia	<ul style="list-style-type: none"> • Exposure to cold wind • Temperatures between 30 and 50 °F 	<ul style="list-style-type: none"> • Stay dry. • Cover head, neck, body, and legs. • End exposure to or get out of wind and rain.
	Frostbite	<ul style="list-style-type: none"> • Skin exposed to extreme cold • Exposure to cold for long periods • Lack of leadership • Lack of experience 	<ul style="list-style-type: none"> • Brief workers on the situation. • Brief workers on cold-weather-injury symptoms. • Wear dry clothing in layers. • Protect hands and feet with proper equipment. • Do not stand in wet areas.
	Chill blains	<ul style="list-style-type: none"> • Exposure to cold over long periods • High humidity 	<ul style="list-style-type: none"> • Reschedule work to allow rotation of workers in and out of the cold. • Provide workers adequate warming areas.
	Immersion/trench foot	<ul style="list-style-type: none"> • Exposure to water for more than 12 hours 	<ul style="list-style-type: none"> • Ensure schedule allows workers to rotate to a warming tent frequently.
	Carbon-monoxide poisoning	<ul style="list-style-type: none"> • Exposure to carbon monoxide • Incomplete combustion of fossil-burning fuels • Defective heating devices • Improper use of equipment • Inadequate ventilation 	<ul style="list-style-type: none"> • Brief workers on use of equipment. • Maintain heating equipment properly. • Use the proper fuel with the proper heater. • Remove defective heaters from use. • Ensure operators are properly licensed. • Ensure adequate ventilation exists.
Conduct all operations	Explosion from UXO	Soldier carrying UXO in gear or vehicle	<ul style="list-style-type: none"> • Provide amnesty boxes at all railheads. • Brief soldiers on UXO and provide EOD telephone numbers to soldiers.

Table 4 Rail Supercargo Checklist	
NOTE: This checklist is written for supercargo personnel, such as guards, traveling on what would otherwise be considered a freight train.	
ITEM TO CHECK	COMPLETED
• All personnel are briefed and instructed on safety standards, procedures, and results of the risk assessment.	
• All personnel are briefed and understand their individual roles and responsibilities during the trip.	
• Personnel clearly understand that climbing on railcars, equipment, support towers, light standards, signal bridges, or any other similar equipment for any reason, from operation start to finish, is strictly forbidden by direction of the CG, USAREUR/7A.	
• Personnel are forbidden from leaving the train unless a hasty risk assessment is performed and briefed by the train commander.	
• Personnel are prepared for the expected trip duration and environment.	
• Personnel have contact information in case they are separated from the train.	
• Medical support is available.	
• Communication equipment is available and has enough power for team members to communicate with the “outside world.” The power source must be strong enough to last the expected length of the trip.	
• Team members are instructed in what to do in case of a personal or train emergency.	
• The following safety equipment is available:	
a. Reflective vests.	
b. Flashlights or chemical lights for dismounted personnel, but not in colors that rail company officials identify as operational signal colors.	
c. Kevlar or OSHA-approved hardhats.	
d. Leather or work gloves (<i>not wool inserts</i>).	
e. Eye protection.	
f. Hearing protection.	
g. A small ladder for exiting or entering the car outside of station platform areas.	
h. A fire extinguisher or other fire-protection equipment is available in each occupied car.	
• Safety standards are monitored and enforced.	
• Participants are shown the location of high-voltage lines, in-service tracks, switches, and other hazardous locations and equipment in the workarea.	
• Protection from cold or inclement weather is provided.	
• Life-support items (for example, food, water, toilet paper) are available based on the anticipated trip length.	
• Team members are forbidden from throwing objects from the train.	
• Team members are forbidden from hanging body parts out of the window of a moving train and in other conditions identified through risk assessment.	
• All team members are forbidden from carrying, purchasing, or consuming alcoholic beverages aboard the train.	

Table 5 Rail Supercargo Generic Risk Assessment			
TASK	HAZARD	CAUSE	CONTROL MEASURE
Prepare to board	Team unaware of hazards en route	<ul style="list-style-type: none"> • No risk assessment • No briefing • Conditions change 	<ul style="list-style-type: none"> • Ensure en route risk assessment is performed. • Brief the team on risks and controls. • Perform quick risk assessment at each stop where individuals disembark. • Brief team on emergency procedures, including separation. • Ensure team members know and understand their assigned duties and responsibilities.
	Team unable to provide adequate medical care	<ul style="list-style-type: none"> • Inadequate planning 	<ul style="list-style-type: none"> • Provide personnel and equipment capable of dealing with routine injuries. • Provide personnel and equipment capable of stabilizing severe injuries.
	Team unable to communicate	<ul style="list-style-type: none"> • Inadequate planning 	<ul style="list-style-type: none"> • Provide capability for personnel to communicate between team members. • Provide capability for team to communicate with “outside world.” • Provide instructions and capability for communicating by commercial means.
	Team exposed to heat or cold	(See AE Pam 385-15-2, table 3.)	
	Team occupies unauthorized areas	<ul style="list-style-type: none"> • No risk assessment 	<ul style="list-style-type: none"> • Ensure that no one rides anywhere other than inside the designated team car. Steps, couplings, rooftop walkways, in or on loaded vehicles or equipment, and on or in other rail cars are all examples of unauthorized riding areas.
	Team unaware of train crew intentions	<ul style="list-style-type: none"> • No communication with train crew 	<ul style="list-style-type: none"> • Have prepared key statements and questions in anticipated languages. • Advise the train engineer when a decision is made to disembark troops. • Maintain communication with engineer while aboard and when disembarked.

Table 5 Rail Supercargo Generic Risk Assessment--Continued			
TASK	HAZARD	CAUSE	CONTROL MEASURE
Riding	Being struck by object while riding on the train	<ul style="list-style-type: none"> • Extending body parts outside the car 	<ul style="list-style-type: none"> • Do not extend head, arms, or other body parts outside the window. Clearances with passing trains and right-of-way objects are very small. Do not attempt to observe the load by this method. Consider alternatives such as a mirror.
	Being struck by objects thrown from the train	<ul style="list-style-type: none"> • Throwing objects from the train 	<ul style="list-style-type: none"> • Do not throw garbage or other material out the window or other opening. • Have enough trashcans on board.
	Falling off the train	<ul style="list-style-type: none"> • Opening doors during the journey • Attempting to cross between cars that do not have personnel walkways 	<ul style="list-style-type: none"> • Do not open doors while the train is moving. • Do not attempt to move between cars unless there is a safe personnel passageway.
	Fire	<ul style="list-style-type: none"> • Disposing of smoking material (for example, cigarette butts, matches) improperly • Smoking in a hazardous environment • Using a portable heater improperly • Cooking in the railcar 	<ul style="list-style-type: none"> • Ensure all smoking material is extinguished before disposing of it. • Use proper receptacles for smoking materials. • Smoke only where and when authorized by the railroad authorities. • Assess surrounding hazards before smoking. • Do not use portable heaters or cooking appliances unless the type and application are approved by the railroad authorities. • Conduct a risk assessment of the portable-heater risk before operating it. • Ensure fire-fighting appliances are available.
	Asphyxiation or carbon-monoxide poisoning	<ul style="list-style-type: none"> • Operating unvented portable heaters in the car • Cooking with a fuel in the car 	<ul style="list-style-type: none"> • Do not use unvented portable heaters without adequate ventilation. • Do not use fuel-fired cooking appliances in the railcar without adequate ventilation.
Operate in the train while it is stopped	Being struck by object	<ul style="list-style-type: none"> • Extending body parts outside the car 	<ul style="list-style-type: none"> • Do not extend head, arms, or other body parts out windows or doors. • If surveillance is required, conduct observations only from the inactive track side of the train.
	Falling from car	<ul style="list-style-type: none"> • Hanging out door 	<ul style="list-style-type: none"> • Maintain three points of contact. • Do not overextend any part of the body.
	Inadvertently giving rail signal	<ul style="list-style-type: none"> • Using whistles or colored lights 	<ul style="list-style-type: none"> • Do not use whistles or colored lights as signals. They may be interpreted as a signal to move a piece of equipment.

Table 5 Rail Supercargo Generic Risk Assessment--Continued			
TASK	HAZARD	CAUSE	CONTROL MEASURE
Exit or deploy guard force	Falling from car	<ul style="list-style-type: none"> Stepping down from a car when not at a platform 	<ul style="list-style-type: none"> Exit only at the platform. Use steps and buddy system. Passenger-car steps are designed to be used at a platform. Gravel or other grades may be a long way from the step. Carry a small electrically nonconductive ladder.
	Being electrocuted	<ul style="list-style-type: none"> Coming within arc distance of energized powerlines or equipment 	<ul style="list-style-type: none"> Prohibit climbing on any railcar or loaded equipment for any reason. Do not carry poles, ladders, or other equipment that might accidentally come within the 1.5-meter arc distance. Validate the arc distance with local rail authorities and adjust for local conditions. Do not climb on electrical towers, signal poles, signal towers, bridges, or any other structure or equipment in the railroad right-of-way.
	Being struck by object	<ul style="list-style-type: none"> Passing train Mechanical handling equipment Right-of way-vehicles 	<ul style="list-style-type: none"> NCOICs will identify and verify active rails and in-process or pending operations in the area and will conduct risk assessments and briefings accordingly. Do not exit or stand between the train and active tracks. A passing high-speed train can suck an individual into it. Freight yards may have single cars moving silently without an engine. Maintain one or more dedicated watch individuals. Maintain constant communication among three people. Stay out of known hazardous areas. Do not walk along tracks or in cargo-handling areas. Cross tracks perpendicular to the rails and move away quickly.
	Being crushed by object	<ul style="list-style-type: none"> Caught in track switch Caught between railcars Caught between passing train 	<ul style="list-style-type: none"> Do not cross tracks at a switch. Avoid positioning body parts between or under cars. Do not exit or stand between the train and active tracks. A passing high-speed train can suck an individual into it. Freight yards may have single cars moving silently without an engine.
	Falling or tripping over object	<ul style="list-style-type: none"> Rails or railroad ties Switch-control wires Cables and hoses Track-maintenance equipment Ice and snow Wet rails and other wet surfaces 	<ul style="list-style-type: none"> Maintain situational awareness. Remember-- <ul style="list-style-type: none"> Walk forward using adequate lighting. Avoid walking backwards. Switch-control wires may run above ground long distances parallel to tracks. Tools and maintenance equipment may be left beside the tracks. Ice and snow may hide trip points or create additional slipping hazards. Rails are normally highly polished by traffic and become very slippery when wet. Oil from operating trains causes slippery conditions when wet.

Table 5 Rail Supercargo Generic Risk Assessment--Continued			
TASK	HAZARD	CAUSE	CONTROL MEASURE
Exit or deploy guard force (continued)	Fire	<ul style="list-style-type: none"> • Disposing of smoking material improperly • Smoking in hazardous environment 	<ul style="list-style-type: none"> • Extinguish all smoking material before disposing of it. • Use proper receptacles for smoking materials. • Smoke only where and when authorized by railroad authorities. • Assess surrounding hazards before smoking.
Reboarding	Falling from car	<ul style="list-style-type: none"> • Stepping or climbing up to car when not at a platform. 	<ul style="list-style-type: none"> • Use steps and buddy system. Passenger-car steps are designed to be used at a platform. Gravel or other grades may be a long way from the step. • Carry a small electrically nonconductive ladder.
	Being crushed by object	<ul style="list-style-type: none"> • Trying to board a moving train 	<ul style="list-style-type: none"> • Do not attempt to board or jump onto a moving train. Execute separated team-member plan. • Have and brief a formal separate plan with written instructions for each member. Include communication specifics. • Train commanders will maintain communication with engineers with information about departure time. • Everyone must maintain situational awareness.